# ATTITUDES OF TEACHERS TOWARDS THE INCLUSION OF CHILDREN WITH SPECIAL NEEDS IN PRIMARY AND SECONDARY SCHOOLS

#### MAJDA SCHMIDT, KSENJA VRHOVNIK

University of Maribor, Faculty of Education, Slovenia, majda.schmidt@um.si

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Abstract: Many researchers emphasize teachers' attitudes as a decisive component in ensuring successful inclusion of students with special needs (SN students). The empirical research that is presented in the main part of this article analyzes the attitudes of primary and secondary teachers towards the inclusion of SN students with respect to the type of school, the teachers' age, the number of SN students in the class, and the teachers') acquired skills. A questionnaire was devised for the study, based on two previous questionnaires: the Questionnaire on Attitudes towards Integration and the Teacher Stress and Coping Questionnaire.

The secondary teachers showed more positive attitudes towards SN students than did their primary colleagues, as well as towards teaching and adaptation with respect to the students' SN and towards the psychophysical strain related to such work. The youngest group of teachers, those aged from 20 to 30, shows a higher level of agreement related to the provision of adequate support. Teachers with fewer SN students in class (up to two students) show a higher degree of support for inclusion of SN students than do other groups of teachers. Teachers without training for work with SN students in comparison with their colleagues who had it show a lower level of agreement with respect to support and assistance at educational work with SN students.

**Key words:** primary and secondary schools, teachers' attitudes, students with special needs, teachers' age, the number of SN students in class, acquired skills

#### INTRODUCTION

International legislation in many European countries promotes inclusive education for students with special needs (SN) by educating them together with their peers in regular schools, instead of sending them to special schools or special classes. The implementation of inclusive education differs considerably from one national and local context to another. Generally, support for inclusion rests on the following two basic presuppositions: the right of children to inclusion in regular schools, and the fact that inclusive education is more effective than segregated education (Lindsay, 2003). According to Kozleski et al. (2011) and Loreman et al. (2011), inclusive education is considered to be a multi-dimensional concept that includes the celebration and valuing of differences and diversity and the consideration of human rights, social justice, and equal opportunities, as well as of a social model of disability. It encompasses the process of school transformation and a focus on children's entitlement and access to education. Inclusive schools have been defined as schools in which all children learn together, receiving quality education and support through appropriate curricula, organizational arrangements, teaching strategies, use of resources and partnership with their communities (UNESCO, 1994). In many countries, the goal of inclusive education is being pursued but has not been fully implemented in practice; one such example is Slovenia. Inclusive education is often used mistakenly in practice as a synonymous term for integration.

In the present paper, the term "inclusive education" emphasizes the equal opportunities that are related to the education of children with SN as close to their homes as possible. For Slovenian teachers, parents, and professionals, inclusion is understood as the placement of children with SN in regular schools with the allocation of additional

professional support (learning support and/or special rehabilitation support), and this can take place in the classroom, outside the classroom, in groups, or individually. The number of children with SN included in regular schools has gradually increased every year (Statistical Office of the Republic of Slovenia, 2012).

In the mid-1990s a Slovenian school system reform introduced inclusion; developmental assessment supported by individualized programs replaced the previous static categorization of SN students (White Paper, 1995, p. 118). In Slovenia, inclusion of children with SN in the educational system became possible with the Placement of Children with Special Needs Act, which was passed in 2000 and amended in 2007. Children with disabilities are classified within the broader category of children with SN in the current legislation (Placement of Children with Special Needs Act, 2007). The term "Children with Special Needs" indicates children who have been allocated additional provisions, support, and adjustments. The teachers, professionals, and parents in Slovenia are familiar with this term. The categories of SN include (1) children with intellectual disabilities, (2) children with hearing and visual impairments, (3) children with physical disabilities, (4) children with speech and language disorders, (5) children with learning disabilities, (6) children with emotional and behavioral disorders, (7) children with health impairments, and (8) children with autistic disorders. The children with other exceptionalities - the gifted and socio-culturally different - are not included. Each category is further defined according to the type and degree of disability (e.g., mild, moderate, severe, profound). Upon inclusion of SN students in regular classes, adaptations and additional professional support can be requested if inclusion in regular classes has been officially proposed by the Committee for Directing Children with Special Needs (Opara, 2005). Despite numerous innovations, Slovene legislation maintains a dual education system. Some SN students are educated separately from their peers, in special schools/institutions, while others attend regular schools along with their peers (inclusion) (Schmidt and Brown, 2015).

However, many solutions proposed by the legislation do not guarantee quality implementation of inclusion in schools. One of the most burning

issues accompanying the implementation of inclusive schooling is teacher training, because not all the conditions have been met to ensure that children with SN are taught by teachers with appropriate professional expertise who can adapt their teaching to children's SN (White Paper, 2011). Many professionals and head teachers warn of problems in the realization of various forms of support for students and teachers in practice (Opara et al., 2010). Since the implementation of the concept of inclusion is complex and has specific features, Slovenian teachers are faced with additional work, new assignments and numerous new responsibilities.

# Studies on teachers' attitudes towards the inclusion of children with SN in primary and secondary schools

Many researchers emphasize teachers' attitudes as a decisive component in ensuring the successful inclusion of SN students (Dulčić and Bakota, 2008; De Boer et al., 2011). Simply put, the attitudes of teachers can enhance or impede the implementation of inclusion.

Teachers who personally support inclusive practice and accept the concept of inclusion can more readily adapt the learning environment to the diverse needs of students and use a variety of approaches and teaching strategies (Ryan, 2009).

In addition to general attitudes towards inclusion, researchers most frequently study factors that have an impact on teacher attitudes: their gender, age, experience, professional training and education, as well as the types and level of impairments/SN in children (Forlin, 1995; Scruggs and Mastropieri, 1996). Other factors that influence the attitude towards inclusion have also been studied, such as the implementation of inclusion at school, sources of support and the distribution of resources, support from the school administration and colleagues, organization framework, etc. (Morley et al., 2005; Jerlinder et al., 2010).

Recent studies have emphasized the importance of teacher training that prepares them for inclusion and gives them more professional expertise, because this better prepares them for work with children with SN, boosts their self-confidence, and helps them develop a more positive attitude towards

inclusive practice (Lakkala and Määttä, 2011; Kudek Mirošević and Jurčević Lozančić, 2014). Studies (Avramidis and Kalyva, 2007; Symeonidou and Phitaka, 2009) have also shown that a positive attitude on the part of teachers is closely connected with good, well planned, and long-term training.

Barber and Turner's (2007) study that examined attitudes of younger primary school teachers showed that teachers at the beginning of their career possess good theoretical knowledge, which makes them efficient; furthermore, additional training is available to them. Forlin et al. (2008) reveals that younger and less experienced teachers are more inclined to implement inclusion, while their older and more experienced colleagues are more concerned about its implementation. Other studies (Rakap and Kaczmarek, 2010; Tsakiridou and Polyzopoulou, 2014) confirm that younger teachers with the least experience are more positive about inclusion.

A study by Talmor et al. (2005) that examined the correlation between environmental factors and stress in inclusive education showed that a high proportion of SN students in inclusive classes(more than 20%), insufficient support, and work overload result in a high level of stress among teachers. Similarly, recent studies by Bhatnagar and Das (2013) and by Mukhopadhyay (2014) emphasize that insufficient preparation of teachers for inclusion and a lack of support undermine teacher self-confidence, while causing stress and preventing successful engagement with the challenges of inclusion.

Studies also revealed the category of the child's special needs to be an important factor connected with teachers' attitudes on inclusion. Teachers are particularly opposed to the inclusion of pupils with social, emotional, and behavioral disorders (Lifshitz et al., 2004; MacFarlane and Woolfson, 2013), while they are generally more supportive of the inclusion of children with physical and sensory disabilities, followed by those with specific learning difficulties (Avramidis and Norwich, 2002; Alghazo and Naggar Gaad, 2004; Lindsay, 2007).

An important aspect of the inclusion of SN students are the teachers' understanding of and expectations from students – i.e., their social representations (SR) – which have an influence on how the students interact and accommodate. A study by Linton et al.

(2015) examined the idea that teachers' SR of students are influenced by their previous experience with disabilities. Previous work-related and/or private experience with disabilities shape the teachers' SR of special needs students in comparison with the teachers with no experience. Teachers with previous experience had more SR elements related to environment and learning factors, while teachers without previous experience had more elements related to the individual's behavior. These results highlight the role of contextual factors and prior experience in the forming of SR.

One notable study about the attitude of secondary teachers towards the inclusion of SN students was conducted by Rose et al. (2007) among vocational school teachers in Estonia. The results showed that the majority of questioned teachers generally had positive attitudes towards inclusion; however, teachers with appropriate training more clearly emphasized the need for change in education and far greater encouragement for the development of inclusion, whereby necessary resources and training about inclusion must be provided for teachers. A study in Bangladesh (Khan, 2012) likewise found that teachers in general agree with inclusion but have reservations towards individual factors that influence its course. Teachers see problems in oversized classes with inappropriate knowledge and teaching aids; they also stress the need for greater support and encouragement for work (Khan, 2012). A study by Ljubić and Kiš-Glavaš (2003) in Croatia that examined the attitudes of primary and secondary teachers towards the inclusion of SN students showed a generally positive attitude among both groups of teachers towards inclusion; however, secondary teachers proved more willing to work with SN students; they were more aware of the importance of inclusion for the socialization of these students, and fewer perceived them as disturbing.

This article presents the results of one of the latest studies examining the attitudes of primary and secondary teachers towards the inclusion of SN students.

#### Aims of the empirical research

We conducted an empirical study the aim of which was to analyze primary teachers' attitudes and the attitudes of teachers in secondary schools towards the inclusion of SN students with respect to the following influences:

- Special needs students
- The inclusion of SN students in schools
- Teachers' preparation to cope with problems of inclusion
- Teaching and adaptation based upon the students' SN
- The teacher's psychophysical workload in inclusive classroom
- The provision of adequate support and assistance in educational work with SN students

During the study, we statistically controlled the role of relevant factors: school, age, the average number of SN students in the classroom, and the teachers' skills in working with SN students. The group of SN students comprises the following: students with hearing and visual impairments, students with speech and language disorders, students with physical disabilities, students with health impairments, students with learning disabilities, and students with emotional and behavior disorders.

#### **Hypotheses**

- H1 There are differences in the teachers' attitudes towards inclusion according to the type of school.
- H2 There are differences in the teachers' attitudes towards inclusion according to the teachers' age.
- H3 There are differences in the teachers' attitudes towards inclusion according to the number of students in the classroom.
- H4 There are differences in the teachers' attitudes towards inclusion with respect to their acquired skills.

#### **METHODOLOGY**

#### Research method

Our study is based on a descriptive and nonexperimental causal method of empirical pedagogical research.

#### Research sample

The sample was non-random and purposive. A total of 500 questionnaires were distributed

to teachers who had students with special needs. Of those, we used 200 questionnaires that were fully completed. The sample comprises 200 teachers from twenty schools in the western part of Slovenia, of whom 100 were teachers in primary schools and 100 were teachers in secondary schools (specifically from vocational and technical education schools) who have students officially recognized as having SN. Fifteen percent of the schools in the western part of Slovenia that have children with SN were included in the study.

Broken down by age, the largest group of teachers in the sample (37.5%) were between 31 and 40 years of age; 29.5% were between 41 and 50; and 24% were over 50 years old. The least represented group of teachers - those aged between 20 and 30 - comprised 9% of the total sample. More than half the teachers in the sample (52%) taught an average of three to five SN students in each class; 39% taught an average of up to two SN students in each class; 9% of the teachers taught an average of more than five SN students in each class. The teachers acquired their skills for work with SN students in the following ways: during graduate studies at the Faculty of Education; in seminars organized by The National Education Institute of the Republic of Slovenia; through additional training for work with children with SN at the Faculty of Education; and through training organized by a special institute, or by self-education. Forty-eight percent of the teachers had completed at least one training course; 27.5%, two training courses; 13.5%, three or more training courses; and 11% had done no additional training for work with children with SN.

#### Data collection procedure

The questionnaires for teachers were sent by regular mail to those standard primary schools and vocational schools in western Slovenia that enroll officially recognized SN students. Prior to that, we had asked school administrations for permission to conduct the survey, and the school counseling service put us in contact with those teachers who had SN students. The teachers were told about the purpose and aims of the study. The questionnaire for teachers was anonymous. Teachers answered the questions individually. They returned the filled-in questionnaires by mail to the researchers.

#### **Ethical considerations**

This study considers strictly the ethical issues related to the research. The purpose, risks, and benefits of the study were explained to the teachers before they decided to participate in the study. The teachers were assured that their participation was voluntary. An identification number was assigned to each participant to maintain the confidentiality of the data.

#### **Instruments**

A questionnaire was devised for the study about the attitudes of teachers towards inclusion of students with special needs. It was based on two previous questionnaires: the Questionnaire on Attitudes towards Integration (Kiš-Glavaš, 1998) and the Teacher Stress and Coping Questionnaire (Forlin, 2001). The first part of the questionnaire comprises general data about the teachers: the type of school where they taught (primary, secondary); their age; the number of SN students they taught; and their acquired training for the inclusion of children with SN. The second part comprises 30 statements and relates to the attitudes of teachers towards the inclusion of SN students in regular school.

The teachers expressed the degree of their agreement with the statements by choosing one of five degrees on a Likert-type scale. These degrees were labeled as follows: *I fully disagree*, *I mostly disagree*, *I do not know / I cannot decide*, *I mostly agree*, and *I fully agree*.

Some statements are negative and some positive from the standpoint of inclusion. In the analysis of individual attitudes, all individual statements (both positive and negative) are graded from 1-I fully disagree to 5-I fully agree. In the analysis of groups of attitudes, the order of grades with negative statements is reversed, from 5-I fully disagree to 1-I fully agree, thus the most highly graded positive attitude had a value of 5.

In terms of Cronbach  $\alpha$ , the tested internal reliability of the instrument was high ( $\alpha$ =0.891).

Statements in the questionnaire comprise six topical groups:

• 1st group: SN students; this includes statements (1 to 4 in the questionnaire) that SN

- students impede educational work in regular schools and that it would be better if they were sent to schools with adapted programs;
- 2nd group: Inclusion of SN students in schools; this comprises statements (from 5 to 11 in the questionnaire) that SN students in regular schools have personal traits similar to those of other students; that they can make friends; that some SN students can also be more successful than others and that their inclusion in regular schools benefits their development and progress;
- 3rd group: Teachers' preparation for coping with problems of inclusion; it includes statements (from 12 to 17 in the questionnaire) that teachers are prepared for educational work with SN students and that they are willing to undergo additional training;
- 4th group: Teaching and adaptation depending on the student's SN; it includes statements 19 and 20, where teachers decide which groups of SN students cause the teacher the most problems in teaching and for which groups can necessary adaptations be introduced;
- 5th group: Teacher's psychophysical strain in an inclusive classroom; it includes statements (21 to 26 in the questionnaire) about the teacher's additional workload, assignments, and administrative work as a result of working with SN students;
- 6th group: Provision of adequate support and assistance in educational work with SN students; it includes the final four statements in the questionnaire (from 27 to 30) about lack of support for teachers from education professionals and parents.

These six groups of statements were extracted on the basis of a factor analysis by Ljubić and Kiš-Glavaš (2003).

#### **Data processing procedures**

The data were processed with the SPSS statistics software. The following statistical methods were used:

- Frequency distribution;
- Basic descriptive statistics;
- T- test and one-way ANOVA.

#### RESULTS

## Analysis of groups of attitudes based on the entire sample of teachers

Skewness of the second and sixth groups show that distribution is mildly skewed to the left, which means higher support for inclusion. Thus, teachers mostly agree with inclusion of SN students in regular schools and are satisfied with the provision of adequate support and assistance of other education professionals and parents in educational work involving students with special needs. The asymmetry coefficient results in other groups show a symmetrical distribution. Variability (Coefficient of Variation) in the first group is 29%; in the second, 18%; in the third, 21%; in the fourth, 16%; in the fifth, 30%; and in the sixth group 26%. The greatest variability can be observed in the fifth group of statements (teacher's psychophysical strain with

work in an inclusive class), followed by the first (SN students) and sixth groups (provision of adequate support and assistance in educational work). The most homogeneous teacher attitude appears in the fourth group. The variability in individual indicators of the general attitude in groups is manifested in the differing levels of ability to sustain psychophysical strain on the part of teachers, the related attitude towards differently expressed needs of students, and a (diverse) attitude towards the provision of adequate support of and assistance from professionals.

#### Analysis of teachers' attitudes with respect to the school, age, number of SN students in class, and acquired skills

The results of the Levene test confirm that the assumption of homogeneity of variances was justified in all groups of attitudes.

**Table 1.** Basic statistics of groups of attitudes

Groups of variables	N	Min	Max	Mean	Standard	Skew	Kurtosis
					deviation		
Students with special needs (SN)	200	4.00	20.00	12.9500	3.79996	-0.239	-0.549
Inclusion of SN students	200	10.00	35.00	24.9600	4.42337	-0.612	0.720
Teacher's preparation for coping with problems	200	7.00	26.00	15.7500	3.35317	0.209	0.250
Teaching and adaptation depending on the student's SN	200	25.00	72.00	47.3400	7.58698	-0.313	0.839
Teacher's psychophysical strain	200	6.00	29.00	14.1150	4.26765	0.437	0.241
Provision of adequate support and assistance	200	4.00	20.00	13.6000	3.57124	-0.416	0.020

**Table 2.** Results of T-test of differences in groups of attitudes with respect to the type of school

Groups of variables	School	N	Mean	Standard	F – Levene test		Test of	
				deviation	of Homogeneity		differences	
				3.75345	of variances		between means	
					F	P	t	P
Students with special needs (SN)	PS*	100	12.3500		0.072	0.788	-2.256	0.025
	SS**	100	13.5500	3.76956				
Inclusion of SN students	PS	100	24.4700	4.18380	0.026	0.873	-1.572	0.117
	SS	100	25.4500	4.61962				
Teachers' preparation for coping with problems	PS	100	15.3400	2.92747	3.544	0.061	-1.738	0.084
	SS	100	16.1600	3.70018				
Teaching and adaptation depending on the	PS	100	46.1600	7.50720	0.209	0.648	-2.221	0.027
student's SN	SS	100	48.5200	7.51897				
Teacher's psychophysical strain	PS	100	13.3300	3.78475	3.650	0.058	-2.640	0.009
	SS	100	14.9000	4.58698				
Provision of adequate support and assistance	PS	100	14.2500	3.14104	3.297	0.071	2.611	0.010
	SS	100	12.9500	3.86221				

Note: \*Primary school (PS)

<sup>\*\*</sup>Secondary school (SS)

The T-test shows a statistically significant difference between means of attitude group results in four groups (the first, fourth, fifth, and sixth). The first three groups indicate a higher level of agreement in the attitudes among secondary teachers compared to primary teachers; however, in the final group, the level of agreement in attitudes of primary teachers is higher than among secondary teachers.

This suggests that secondary teachers show a more positive attitude towards SN students and towards teaching and adapting with respect to type of SN than their primary school colleagues do, which is in line with the results of a Croatian study by Ljubić and Kiš-Glavaš (2003), and they also demonstrate a more positive attitude towards the psychophysical strain of teachers. Attitudes regarding provision of adequate support and assistance in educational work are more positive in primary teachers. Rose et al. (2007) and Khan (2012) also

report a generally positive attitude among secondary teachers towards inclusion, but at the same time emphasize the need of teachers for more support from professionals, in particular special educators.

The assumption of homogeneity of variances was justified in all six groups of attitudes.

One-way ANOVA shows a statistically significant difference only in the sixth group of attitudes, which concerns claims about the provision of adequate support and assistance in educational work with SN students. We can see that the youngest group of teachers, those aged 20 to 30, show a higher level of agreement with the provision of adequate support and assistance in educational work with SN students than the other age groups of teachers. The lowest level of agreement is shown by the group of teachers aged 41 to 50, followed by the teachers over 50 years of age. The positive attitudes of the youngest teachers have also

**Table 3.** Results of one-way ANOVA testing the differences in groups of attitudes with respect to teacher's age

Groups of variables	Teacher's age	N	Mean	Standard deviation	F – Levene test of Homogeneity of variances		One-way ANOVA	
					F	P	F	P
Students with special needs (SN)	20–30	18	14.2222	3.43949	1.159	0.327	0.852	0.467
	31–40	75	12.8267	3.53887				
	41–50	59	13.0169	4.14601				
	Over 50	48	12.5833	3.89125				
Inclusion of SN students	20-30	18	27.2778	2.90649	0.943	0.421	2.399	0.069
	31–40	75	24.8533	4.44696				
	41–50	59	24.1695	4.66518				
	Over 50	48	25.2292	4.34296				
Teacher's preparation for coping with	r coping with 20–30 18 16.5000	3.01467	0.339 0.	0.797	1.244	0.295		
problems	31–40	75	15.2267	3.39942	1			
	41–50	59	15.7966	3.22051				
	Over 50	48	16.2292	3.52643				
Teaching and adaptation depending on the	20-30	18	48.8889	5.63486	0.796	0.498	0.296	0.828
student's SN	31–40	75	47.2267	7.71550				
	41–50	59	46.9831	7.66427				
	Over 50	48	47.3750	8.05731				
Teacher's psychophysical strain	20-30	18	16.2778	4.17000	0.652	0.583	2.145	0.096
	31–40	75	14.1333	4.16008				
	41–50	59	14.0847	4.70981				
	Over 50	48	13.3125	3.70828				
Provision of adequate support and assistance	20-30	18	15.5556	2.72725	0.272	0.845	3.163	0.026
	31–40	75	13.9600	3.59970	1			
	41–50	59	12.8814	3.60596				
	Over 50	48	13.1875	3.51687	1			

been highlighted by other studies (Forlin et al., 2008; Rakap and Kaczmarek, 2010; Tsakiridou and Polyzopoulou, 2014), and they also found that younger teachers had accumulated more knowledge about inclusion at university and knew more about the characteristics of SN students, with individual differences and the concept of inclusion, which may have resulted in their more open view of inclusion. In the other five groups of attitudes, no statistically significant differences exist with respect to teacher age.

The assumption of homogeneity of variances was justified in all six groups of attitudes.

The result of one-way ANOVA confirms the existence of a statistically significant difference only in the first group of attitudes. It is evident that the group of teachers with the lowest number of SN students in class (up to two students) shows a higher level of agreement in the relationship towards SN students than other groups of teachers. The lowest level of agreement in this group appears in the group of teachers with the highest number of SN students in class. In the other five groups of teacher attitudes with respect to the number of

SN students, no statistically significant differences exist between means.

The higher levels of support for inclusion by teachers with a lower number of SN students in class, compared to teachers with a large number of SN students, is probably the result of several factors: their lower psychophysical strain, the opportunity to implement teaching adaptations and to comply with the official standards and goals of the educational program more easily, and the ability to manage the class and consider the needs of all students (Forlin, 2001; Lakkala and Määttä, 2011; Mukhopadhys, 2014).

The assumption of homogeneity of variances was justified in three groups of attitudes (the first, third and fifth). In the other three groups, the assumption of homogeneity of variances was not justified; we therefore rely on the approximation one-way ANOVA method. The result confirms the existence of a statistically significant difference (F = 3.856; P = 0.014) only in the sixth group of attitudes.

The group of teachers who have no training in working with SN students, in comparison to their

**Table 4.** Results of a one-way ANOVA testing the differences in groups of attitudes with respect to the number of SN students in the classroom

Group of variables	Average number of SN	N	Mean	Standard deviation	F – Levene test of Homogeneity of variances		One-way ANOVA	
	students				F	P	F	P
Students with special needs (SN)	0–2	78	13.7821	3.44398	2.112	0.124	3.204	0.043
	3–5	104	12.4712	3.88414				
	Over 5	18	12.1111	4.30989				
Inclusion of SN students	0–2	78	25.2308	4.05137	1.069	0.345	0.445	0.642
	3–5	104	24.8942	4.57710				
	Over 5	18	24.1667	5.17062				
Teacher's preparation for coping with problems	0–2	78	15.7179	3.50472	1.135	0.323	0.152	0.859
	3–5	104	15.7019	3.39869				
	Over 5	18	16.1667	2.40710				
Teaching and adaptation depending on the	0–2	78	47.8205	7.46723	1.248	0.289	0.278	0.758
student's SN	3–5	104	46.9712	7.98233				
	Over 5	18	47.3889	5.77152				
Teacher's psychophysical strain	0–2	78	14.6923	4.71887	1.686	0.188	1.208	0.301
	3–5	104	13.7885	4.01133				
	Over 5	18	13.5000	3.50210				
Provision of adequate support and assistance	0–2	78	13.2051	3.80826	1.856	0.159	1.682	0.189
	3–5	104	13.6731	3.47374				
	Over 5	18	14.8889	2.82612				

Table 5. Results of a one-way ANOVA testing the differences in groups of attitudes with respect to acquired skills

Group of variables	Acquired skills	N	Mean	Standard deviation	of Homogeneity of variances		One-way ANOVA	
					F	P	F	P
Students with special needs (SN)	0	22	11.8182	4.58399	2.137	0.097	1.621	0.186
	1	96	12.7500	3.71342				
	2	55	13.2000	3.90821				
	3 and more	27	14.0741	2.96033				
Inclusion of SN students	0	22	24.3182	6.92398	4.641	0.004	0.431	0.732
	1	96	25.2188	3.95289				
	2	55	24.5636	4.20213				
	3 and more	27	25.3704	4.02060				
Teacher's preparation for coping with	0	22	14.1818	3.18682	0.498	0.684	2.146	0.096
problems	1	96	15.7813	3.51898				
	2	55	15.9636	3.19121				
	3 and more	27	16.4815	2.95310				
Teaching and adaptation depending on the	0	22	45.8636	9.75556	2.699	0.047	2.008	0.123
student's SN	1	96	47.7917	6.07483				
	2	55	45.7273	8.18864				
	3 and more	27	50.2222	8.53650				
Teacher's psychophysical strain	0	22	13.9545	4.06468	0.504	0.680	2.578	0.055
	1	96	14.0938	4.05509				
	2	55	14.4545	4.61807				
	3 and more	27	13.6296	4.60057				
Provision of adequate support and assistance	0	22	11.4545	5.01167	5.328	0.002	3.856	0.014
	1	96	13.4792	3.49128				
	2	55	14.6909	2.64486				
	3 and more	27	13.5556	3.43437				

colleagues who do, shows a lower level of agreement with respect to the provision of adequate support and assistance in educational work with SN students. Teachers with no knowledge about working with SN students are probably less prepared for work in an inclusive classroom and do not believe in the effective teaching of students with various special needs; this result concords with the findings of other studies (Jordan et al., 2009; Bhatnagar and Das, 2013). In addition, they do not see their role and responsibility clearly when seeking professional assistance for SN students and in active cooperation and participation with school counselors, special educators, other teachers, and parents, although this is essential for progress and effective work with children who have special needs.

To conclude, the result of the one-way ANOVA in attitude groups with respect to the role of acquired skills shows a more positive attitude among teachers who had acquired skills for working with SN stu-

dents through various kinds of training, compared to those teachers who had less training or none at all. The importance and value of the education and training of teachers for inclusion has been emphasized by a considerable number of both older and more recent studies, such as Stančić et al. (2001), Avramidis and Norwich (2002), Rakap and Kaczmarek (2010), and Strogilos and Tragoulia (2013), which point out that teachers need good training in inclusion in order to be able to recognize and assess students' needs and disabilities, as well as to plan and implement efficient strategies and support for working with them, while cooperating and working together with experts and parents of children with special needs in the development of individualized programs.

#### DISCUSSION AND CONCLUSION

This empirical study examined the attitudes of primary school and secondary school teachers

towards the inclusion of SN students. Its aim was to determine how their attitudes are affected by the type of school; the teachers' age; the number of SN students in the class; and the teachers' acquired skills in working with SN students.

The following are the main findings:

- T-test results in groups of attitudes with respect to the *type of the school* suggest that secondary teachers show more positive attitudes towards SN students than their primary school colleagues do, as well as towards teaching and adaptation with respect to the specific SN and towards the psychophysical strain related to such work. Attitudes regarding the provision of adequate support and assistance in educational work are more positive in primary teachers.
- The one-way ANOVA in groups of attitudes with respect to *age* shows a statistically significant difference in the sixth group of attitudes, those dealing with claims about the provision of adequate support and assistance in educational work with SN students. The youngest group of teachers, those aged 20 to 30, shows a higher level of agreement related to the provision of adequate support and assistance in educational work with SN students than other age groups of teachers.
- The results of the one-way ANOVA in groups of attitudes with respect to the *role of the number of SN students* show a statistically significant difference in the first group dealing with student numbers. Teachers with fewer SN students in class (up to two students) show a higher degree of support for the inclusion of SN students than do other groups of teachers.
- The one-way ANOVA in groups of attitudes with respect to the role of acquired skills shows a statistically significant difference in the sixth group of attitudes dealing with claims about the level of provision of adequate support and assistance in educational work with SN students. Teachers without training in working with SN students in comparison with their colleagues who had such training show a lower level of agreement about the support and assistance provided in their educational work with SN students.

In our study, the type of the school at which the teachers work is a factor that had an impact on the level of teacher agreement with inclusion. Secondary teachers are more supportive of inclusion compared to primary teachers, which is in line with the results of a Croatian study (Ljubič and Kiš-Glavaš, 2003). From this aspect, the hypothesis was confirmed. However, the results are somewhat surprising in light of the fact that, after the adoption of new legislation, the reform of the educational system was more successful in primary schools than in secondary schools even though primary school teachers did receive training for working with children with SN both at university faculties and through the National Education Institute, while the training of secondary school teachers was less well implemented (Opara et al., 2010). Secondary teachers today have to deal with a growing number of SN students in regular classes and receive more additional professional support for students; in addition, the teachers have more experience with the students. The more positive attitudes of secondary teachers can probably be attributed to their positive personal experience with these students (which might have an impact on attitude development) as well as the fact that primary students include more intensive and diverse SN compared to those seen in secondary school, which exposes teachers to a range of professional stresses and responsibilities. The more positive attitudes of primary teachers towards the provision of adequate support and assistance in educational work compared to the attitudes of their secondary school colleagues most likely reflect the situation in actual pedagogical practice, since in primary schools, special educators are included in the provision of additional rehabilitation assistance to children with SN (more and more are being hired by primary schools) (Schmidt et al., 2015); this does not apply to secondary schools. With the growing number of SN students, it is our belief that secondary schools and their teachers should have the opportunity to continuously cooperate and work with special educators. Only in this way will it be possible to solve problems the moment they appear and thus improve efficiency.

The next factor that had an impact on the level of teacher agreement with inclusion was teach-

ers' age. The group of the youngest teachers in our study had a more positive attitude towards the provision of adequate support and assistance in educational work than their older colleagues; in this respect the hypothesis was confirmed. These results were also confirmed by international studies (Forlin et al., 2008; Rakap and Kaczmarek, 2010). It can be assumed that this occurred because they had graduated recently and had thus better accepted the concept of inclusion and considered themselves to be more competent. The results can serve as a message to schools, university faculties, and the administration at the Slovenian Ministry of Education that it is necessary to systematically support the professional development of all teachers who work in inclusion and to allow them to upgrade their skills in a timely manner. Only in this way can they feel more secure in their capacity to deal with students' diverse needs.

International studies (Talmor et al., 2005; Bhatnagar and Das, 2013; Muhpadhys, 2014) warn that the number of SN students in inclusive classes should not be too high. Our study has shown that teachers with fewer SN students (up to 2) have a more positive attitude towards inclusion. So in this respect the hypothesis was confirmed. Too high a number of children with SN represents a major obstacle in the education process; teachers are overworked and confronted with significant problems in class management and the implementation of curricular and educational adaptations, while being exposed to higher stress levels (Avramidis and Kalyva, 2007). In order for teachers to provide a supportive and encouraging environment for all children, schools must carefully plan the number of children with SN in classrooms and enable good teaching that is accessible to all students, whereby the students should be offered general support by other experts.

One of the most important factors that have an impact on the successful implementation of inclusion is the teacher's skills concerning work with SN students. Our study has shown that teachers without training for working with SN students in comparison with their trained colleagues show more negative attitudes towards support and assistance at educational work with SN students, which is consistent with other studies (Bhatnagar and Das,

2013). In this respect as well, the hypothesis was confirmed. Certainly, the role of the teacher in implementing inclusive education process is central. Positive attitudes towards inclusion and good professional teacher qualifications determine the efficacy of inclusion and the success of SN students in school (Avramidis and Norwich, 2002; Kudek Mirošević and Jurčević Lozaninčić, 2014). In order to raise the level of teacher qualification for inclusion in Slovenia, we need quality study programs and sufficient course openings to enable both undergraduate training for teachers in training, and postgraduate training for professional teachers already in the workforce. Since inclusion requires constant amendment of practice and development of new teaching strategies and skills, it is essential to offer intensive, systematic, and ongoing staff development to future teachers and practicing teachers. The experiences of good practice should be considered; in particular, the transmission of relevant theoretical knowledge in the professional training of teachers for inclusion should include practical, active, and collaborative training activities (workshops, study groups, and problem-based training) that encourage teachers to discuss and reflect on their own work, while developing confidence in their own abilities (Burke and Sutherland, 2004; Strogilos and Tragoulia, 2013; Tsakiridou and Polyzopoulou, 2014).

In order to meet the diverse needs of students in inclusive classrooms, teachers require continuous support from special educators, other experts, and support staff (assistants and volunteers).

In particular, support centers at special institutions in Slovenia could perform a number of tasks related to inclusion. Besides the organization of additional professional support for SN students in regular schools, the centers could provide counseling for teachers, parents, and children; assistance in the preparation of learning aids and materials; and individualized program design support. In addition, they could help with the planning and evaluation of adaptations as well as the development of intervention programs.

However, this study has some limitations. It included only a relatively small sample of teachers from the western part of Slovenia. For investigating attitudes, a questionnaire for teachers was used,

while a qualitative approach was not applied. More in-depth insight into the experience and perception of inclusion could have been achieved by using interviews. The study focused only on teachers' self-reported information; there was no observation of schools and classrooms with SN students

to understand the process of inclusive practice in Slovenia. future studies should investigate the attitudes of multiple stakeholders – school headteachers, special educators, students, teachers without work experience with SN students, and parents alike – in order to get a more holistic picture.

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### STAVOVI NASTAVNIKA PREMA INKLUZIJI DJECE S POSEBNIM POTREBAMA U OSNOVNE I SREDNJE ŠKOLE

Sažetak: Mnogi istraživači naglašavaju da su stavovi nastavnika presudnan čimbenik uspješne inkluzije učenika s posebnim potrebama. U ovom istraživanju analizirani su stavovi nastavnika osnovnih i srednjih škola prema inkluziji ovih učenika u odnosu na vrstu škole, dob nastavnika, broj učenika s posebnim potrebama u razredu i nastavnikovih usvojenih vještina za rad s učenicima s posebnim potrebama. U istraživanju je korišten upitnik nastao na temelju ranije korištenih dvaju upitnika: Upitnika o stavovima pprema integraciji te Upitnika o stresu i nošenju sa stresom kod nastavnika. Nastavnici iz srednjih škola pokazali su pozitivnije stavove prema učenicima s posebnim potrebama od njihovih kolega u osnovnim školama, kao i prema poučavanju i prilagodbama u odnosu na učenike s posebnim potrebama, kao i psihofizičkom opterećenju povezanom s ovakvim radom. Najmlađa skupina nastavnika, oni u dobi između 20 i 30 godina, pokazala je višu razinu slaganja glede pružanja adekvatne podrške učenicima. Nastavnici koji su u odjeljenju imalimnaji broj učenika s posebnim potrebama (do 2 učenika) iskazali su višu razinu podrške učenicima s posebnim potrebama od ostalih skupina nastavnika. Nastavnici koji nisu imali edukaciju o učenicima s posebnim potrebama, usporedbi s kolegama koji su imali, pokazali su nižu razinu slaganja u odnosu na podršku i pomoć u odgojno-obrazovnom radu s učenicima s posebnim potrebama.

Ključne riječi: osnovna i srednja škola, stavovi nastavnika, učenici s posebnim potrebama, dob nastavnika